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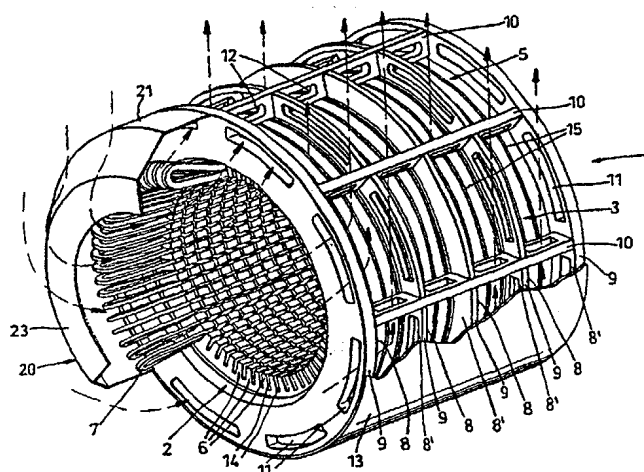
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(54) Title: AIR COOLED ELECTRICAL MACHINE



(57) Abstract: An electrical machine (1) comprising a stator (2) and a rotor has radially extending coolant passageways (15) provided in a laminated core section (3) of at least the stator, the coolant passageways (15) being defined between axially spaced stacks of laminations in the laminated core section. The radial passageways are connected to coolant supply duct means (22) through the gap between the stator and the rotor. More efficient cooling of the machine is obtained by providing a matrix of coolant duct sections (5) extending circumferentially and axially of the core section (3), the matrix having first and second radially spaced apart faces respectively in fluid communication with the radially extending coolant passageways (15) in the laminated core section (3) and coolant exhaust ducts (26). Some of the coolant duct sections (5) communicate directly with the coolant exhaust ducts (26) through the second face of the matrix and some or all of the adjacent coolant duct sections (5) are in fluid communication with each other transverse of the radial direction to transfer coolant in a predetermined path within the coolant duct matrix.

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